

CARBON REDUCTION PLAN GUIDANCE

Notes for Completion

Where an In-Scope Organisation has determined that the measure applies to the procurement, suppliers wishing to bid for that contract are required at the selection stage to submit a Carbon Reduction Plan which details their organisational carbon footprint and confirms their commitment to achieving Net Zero by 2050.

Carbon Reduction Plans are to be completed by the bidding supplier entity and must meet the reporting requirements set out in supporting guidance, and include the supplier's current carbon footprint and its commitment to reducing emissions to achieve Net Zero emissions by 2050.

The Carbon Reduction Plan should be updated regularly (at least annually) and published and clearly signposted on the supplier's UK website. It should be approved by a director (or equivalent senior leadership) within the supplier's organisation to demonstrate a clear commitment to emissions reduction at the highest level. Suppliers may wish to adopt the key objectives of the Carbon Reduction Plan within their strategic plans.

A template for the Carbon Reduction Plan is set out below. Please complete and publish your Carbon Reduction Plan in accordance with the reporting standard published alongside this PPN.

Carbon Reduction Plan Template

Supplier name: Tarmac Trading Limited
Publication date: 30 September 2024

Commitment to achieving Net Zero

Tarmac Trading Limited is committed to achieving Net Zero CO₂ before 2050.

Baseline Emissions Footprint

Baseline emissions are a record of the greenhouse gases that have been produced in the past and were produced prior to the introduction of any strategies to reduce emissions. Baseline emissions are the reference point against which emissions reduction can be measured.

Baseline Year: 1990

Additional Details relating to the Baseline Emissions calculations.

This Carbon Reduction Plan covers the activities carried out by Tarmac Trading Limited. As a business, Tarmac has been monitoring its operational carbon emissions (Scope 1 and 2) since 1990 and reporting publicly since 2008. Tarmac has adopted a 1990 baseline, to align with UK Government's commitments under the Climate Change Act.

Tarmac's process for Scope 3 CO_2 emissions continues to evolve and the business is working closely with its supply chain to ensure robust data is provided in the future. As a result, the Scope 3 emissions outlined in this report are against a 2020 baseline.

Tarmac Trading Limited also operates wholly-owned subsidiaries Alun Griffiths (Contractors) Limited and J.B. Riney & Co. Limited. As accurate 1990 baseline data is unavailable for these organisations, a 2020 performance baseline has been used.

All data captured and reported in this plan is in line with UK Government Environmental reporting guidelines (March 2019) and the Greenhouse Gas Protocol, *Technical Guidance for Reporting Scope 3 Emissions (v.1.0)*.

Baseline year emissions: 1990

EMISSIONS	TOTAL (tCO ₂ e)
Scope 1	680,021 tCO ₂ e
Scope 2	289,456 tCO ₂ e

Scope 3	285,773 tCO ₂ e (2020 baseline)
(Included Sources)	(Includes: upstream transportation & distribution (excluding capital goods transport), waste generated in operations, business travel, employee commuting, downstream transportation & distribution)
Total Emissions	1,255,250 tCO ₂ e

Current Emissions Reporting

Reporting Year: 2023		
EMISSIONS	TOTAL (tCO₂e)	
Scope 1	242,026 tCO ₂ e	
Scope 2	Location-based (using UK average emission factor): 128,145 tCO ₂ e Market-based (taking account of REGO certified electricity use): 14 tCO ₂ e	
Scope 3 (Included Sources)	278,485 tCO ₂ e (Includes: upstream transportation & distribution (excluding capital goods transport), waste generated in operations, business travel, employee commuting, downstream transportation & distribution)	
Total Emissions	520,526 tCO ₂ e (market-based)	

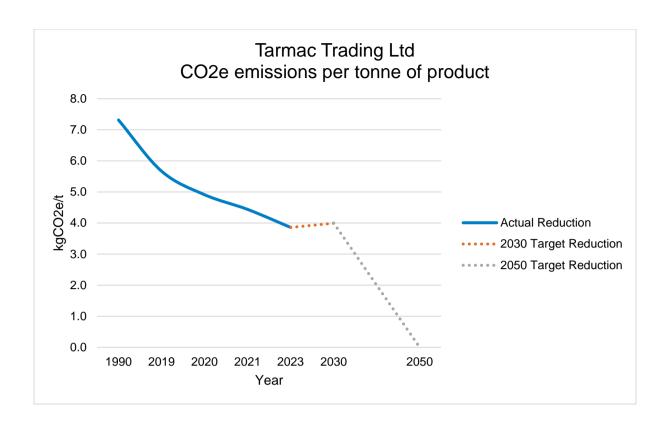
Emissions reduction targets

In order to continue our progress towards achieving Net Zero CO₂, Tarmac has adopted the following CO₂ reduction target for its overall business:

Achieve a 45% reduction in CO₂e per tonne of product by 2030 (from 1990).

Tarmac project that absolute Scope 1 and 2 carbon emissions will be 275,000 tCO₂e by 2030. The business is working towards including Scope 3 emissions in its 2030 target.

Progress against these targets can be seen in the graph below:



Carbon Reduction Projects

Completed Carbon Reduction Initiatives

The following environmental management measures and projects have been completed or implemented. The absolute Scope 1 and 2 carbon emission reduction achieved by these schemes equates to 725,000 tCO₂e, a 47% reduction in CO₂e per tonne of product against the 1990 baseline and the measures will be in effect when performing the contract.

- The processes and procedures that form our ISO 50001-certified Energy Management System (EMS) ensure we operate at a high standard, and drive continuous improvement (CI) in our energy usage. Specific energy consumption and CO2 targets are set for all of our manufacturing sites, enabling us to monitor performance and make these targets more stringent each year to support CI efforts and the investment behind these. Tarmac's ISO 50001 system is independently assessed to help ensure that all operations are compliant with regulatory requirements, including the UK Government's Energy Savings Opportunity Scheme (ESOS) and Streamlined Energy and Carbon Reporting (SECR).
- Tarmac's EMS is also independently assessed and certified to ISO 14001, which is embedded at all operational sites and implemented through site policies, procedures and processes to manage the environmental impacts of activities and ensure a high standard of environmental management and control.
- In 2023, Tarmac launched its Net Zero Roadmap, which sets out the pathway for Tarmac
 to reach net zero carbon emissions by 2050 and support the UK's net zero targets. The
 roadmap demonstrates the strategic initiatives through which we intend to reach our target
 of cutting CO2 emissions by 45% per tonne of product by 2030, and the future enablers
 we will explore longer-term to reach net zero.

- Throughout 2023, we continued to source 100% clean electricity, supplied entirely through clean UK-based wind and solar, fully traceable to source through REGO certificates. This makes us a leader of our parent company CRH's 100% club, which encourages our sister companies to also make the transition to ensuring 100% of their electricity is from renewable sources.
- Our Sustainability team continue to deliver business-wide training on how to work in line
 with our Sustainability strategy, including ways to run our sites more energy efficiently.
 With materials targeted for specific audiences, in 2023, 284 members of Tarmac staff
 underwent this training.
- Tarmac has continued to invest in Environmental Product Declaration (EPD) and carbon footprinting, delivering 3,137 carbon footprints in 2023. This improves our customers' understanding of the embodied carbon and environmental impact of our products, enabling them to make informed decisions around material use, development and trialling of bespoke low-carbon solutions, and the selection of the lowest carbon option.
- Tarmac has been signed up to the EV100 initiative for three years and remains committed
 to transitioning 100% of our company car and van fleet to electric before 2030. By the end
 of 2023, over 30% of our company car fleet was an electric vehicle either in use or on
 order, and we have been trialling electric vans throughout the year.
 - To enable our employees to make the switch to electric, we now have electric charging points installed at many of our sites, and plan to continue increasing this number. We also have electric charging points in place at 50 per cent of our JB Riney depots in the greater London area after introducing five electric vehicles to the fleet in 2023.
- In a UK first for the construction materials sector, in June and July of 2023, Tarmac successfully trialled the use of biomethane fuel in a heavy goods vehicle (HGV) in partnership with CNG Fuels. The three week-long trial tested the range of a 44 tonne HGV hauling a bulk cement tanker, with the fuel having the potential to deliver a net reduction of up to 90% in CO2 emissions.
- In 2023, Tarmac re-opened a Peak District rail connection to expand the supply of aggregates to our customers via freight trains. A new internal rail siding at Hillhead Quarry was developed and connected to the rail network to help meet current demand, with the added advantage of rail transport reducing carbon emissions over road vehicles.
- To maximise efficiency on site, the team at Tarmac's Sonning Quarry upgraded the conveyor system in 2023, fitting a wider belt at a lower gradient that would combat the inefficiency of the old system. This change has eliminated the previous spillage issues that would result from poor weather and wet materials, significantly reducing downtime to improve energy efficiency and reduce consumption from 30kWh to 18kWh.
- Our Tyttenhanger Quarry in Hertfordshire also made upgrades in 2023, changing its water pumping system from a diesel pump to a more sustainable electric replacement that will reduce energy consumption by 35kWh without impacting production.
- In autumn 2023, Tarmac partnered with Hartlepool Borough Council and Stockton-on-Tees Borough Council to deliver the lowest carbon roads ever to be resurfaced in the UK.
 The project delivered a reduction in carbon emissions of up to 80% compared to traditional methods by combining an extensive range of low carbon materials, delivery techniques,

and plant equipment, and has helped to lay a new blueprint for how roads are maintained in the UK.

 Aligning our transition to net zero alongside our commitment to maintaining our status as a net user of waste, Tarmac is committed to continually increasing our recycling of road materials, and in 2023, utilised over 985,000 tonnes of recycled asphalt planings (RAP).

In the future we hope to implement further measures such as:

- In 2024, we will continue to work towards a net zero society. Following the launch of Tarmac's 'Roadmap to net zero', we hope to build on the progress we made in 2023 through collaboration and taking part in new trials and innovative projects to help us further reach our goals. Tarmac will continue to explore new product and logistics solutions we can offer our customers to contribute to the reduction of carbon emissions on all projects.
- From the end of 2024, Tarmac will hold PAS 2080 Carbon Management in Infrastructure certification as a Constructor and Product/Material Supplier, which will continue to drive our commitment to recording, managing and reducing both our own carbon emissions and those of the whole value chains in which we work.
- Following the success of our low carbon roads trials with local authorities Hartlepool Borough Council and Stockton-on-Tees Borough Council, Tarmac will explore further opportunities to take the same approach on other resurfacing projects we undertake, challenging ourselves to deliver roads that are as close to net zero as possible.
- Where we have successfully implemented energy saving solutions on some of our sites, we will explore further opportunities to do so at our other sites. At our Birmingham asphalt plant, 10% of the site's power supply comes from the hundreds of solar photovoltaic (PV) panels installed on the plant's roof. We are now working on designs to roll out this technology at other similar sites across the UK, which will place less demand on the national electricity network, as well as making our operations even more sustainable.
- In 2023, Tarmac and DE Plant partnered with Volvo and Schäfer-technic to develop an allelectric, zero-emission bond coat sprayer, which offers carbon savings of 1.12kg CO2e/km – equivalent to driving 6,000km in a diesel car. The electric sprayer was used for the first time on the A120 in Essex, and has now moved to service the area surrounding the M25 to continue helping contractors to cut carbon emissions on road surfacing projects across East Anglia and the Southeast.

As part of the development of the electric sprayer, Tarmac also worked with BituChem to develop a new product to replace traditional bitumen. In the absence of a diesel generator to keep the bitumen warm and ready for spraying, the company's Bondcoat Duo was created to be used as a cool product, enabling the battery's energy to be conserved since there is no requirement for hot material on site. National Highways has now approved the use of Bondcoat Duo on the strategic road network, which has the potential to offer further carbon savings if used by existing bond coat sprayers as there would be no need to use diesel to heat the product for use.

Declaration and Sign Off

This Carbon Reduction Plan has been completed in accordance with PPN 06/21 and associated guidance and reporting standard for Carbon Reduction Plans.

Emissions have been reported and recorded in accordance with the published reporting standard for Carbon Reduction Plans and the GHG Reporting Protocol corporate standard¹ and uses the appropriate Government emission conversion factors for greenhouse gas company reporting².

Scope 1 and Scope 2 emissions have been reported in accordance with SECR requirements, and the required subset of Scope 3 emissions have been reported in accordance with the published reporting standard for Carbon Reduction Plans and the Corporate Value Chain (Scope 3) Standard³.

This Carbon Reduction Plan has been reviewed and signed off by the board of directors (or equivalent management body).

Signed on behalf of the Supplier:

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Bevan Browne

Managing Director, UK Materials

Date: 30th September 2024.....

¹ https://ghgprotocol.org/corporate-standard

² https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting

³ https://ghgprotocol.org/standards/scope-3-standard